



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,858	09/17/2003	Oded Shmueli	24997	2855
67801 7590 11/24/2009 MARTIN D. MOYNIHAN d/b/a PRTSI, INC. P.O. BOX 16446 ARLINGTON, VA 22215				
EXAMINER WINTER, JOHN M				
ART UNIT 3685		PAPER NUMBER		
MAIL DATE 11/24/2009		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/663,858

## Applicant(s)

SHMUELI ET AL.

## Examiner

JOHN M. WINTER

## Art Unit

3685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) See Continuation Sheet is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

Continuation of Disposition of Claims: Claims pending in the application are 1-5, 24, 32, 34, 45, 48, 60, 81, 92, 100, 123, 138, 146, 158, 167, 168, 169, 199, 215, 225, 235, 251, 266, 276, 285 and 301t.

Continuation of Disposition of Claims: Claims rejected are 1-5,24,32,34,45,48,60,81,92,100,123,138,146,158,167-169,199,215,225,235,251,266,276,285 and 301.

## **DETAILED ACTION**

### ***Acknowledgements***

1. The Applicants amendment filed on August 12, 2009 is hereby acknowledged, 1-5, 24, 32, 34, 45, 48, 60, 81, 92, 100, 123, 138, 146, 158, 167, 168, 169, 199, 215, 225, 235, 251, 266, 276, 285 and 301 remain pending.

### ***Response to Arguments***

2. The Applicants arguments filed on August 12, 2009 have been fully considered.
3. The Examiner states that regarding the pending claims, the word “means” is preceded by the word(s) “party goal program ” in an attempt to use a “means” clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding “means,” it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112,sixth paragraph. See Ex parte Klumb, 159 USPQ 694 (Bd. App. 1967).

### ***Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-5, 24, 32, 34, 45, 48, 60, 81, 92, 100, 123, 138, 146, 158, 167, 168, 169, 199, 215, 225, 235, 251, 266, 276, 285 and 301 rejected under 35 U.S.C. 101 because

the claimed invention is directed to non-statutory subject matter. These claims are directed towards a "platform" because it is unclear what statutory class is claimed the Examiner submits that the claims are directed towards non-statutory subject matter , for purposes of examination these claims will be considered "apparatus" type claims..

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-5, 24, 32, 34, 45, 48, 60, 81, 92, 100, 123, 138, 146, 158, 167, 168, 169, 199, 215, 225, 235, 251, 266, 276, 285 and 301 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite because it is a hybrid claim. In particular, the claim appears to be directed to neither a "process" nor a "machine," but rather embraces or overlaps two different statutory classes of invention. Evidence to support an interpretation that claim 1 is a *product* is (1) the preamble which states "the platform being a computerized apparatus " Alternatively, evidence that indicates the claim is directed to a *process* or method is the body of the claim which recites "carrying out negotiations, assigning to deviation etc.. " Because of this conflicting evidence, it is unclear if claim 1 is a product or process claim. See the 35 U.S.C. § 101 rejection above. See MPEP §2173.05(p) II or Ex Parte Lyell, 17 USPQ2d 1548 (B.P.A.I. 1990). If Applicants overcome this particular rejection, the 35 U.S.C. § 101 rejection will also be

withdrawn. For prior art purposes, the Examiner interprets the claim as being drawn to a product claim.

Claims 1-5, 24, 32, 34, 45, 48, 60, 81, 92, 100, 123, 138, 146, 158, 167, 168, 169, 199, 215, 225, 235, 251, 266, 276, 285 and 301 are either dependant upon claim 1 or contain similar limitations and are rejected for at least the same reasons.

6. Claims 1, 81, 92, 100, 123, 138, 146, 158, 167, 168, 169, 199, 215, 225, 235, 251, 266, 276, 285 and 301 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
7. These claims recite the language “a party goal program means for” it is unclear what the scope of this limitation is. For Examination purposes these claims will be construed as “a party goal program *having* means for”. An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed...In re Zletz 13 USPQ2d 1320 (Fed. Cir. 1989).

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-5, 24, 32, 34, 45, 48, 60, 81, 92, 100, 123, 138, 146, 158, 167, 168, 169, 199, 215, 225, 235, 251, 266, 276, 285 and 301 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burchetta et al. (US Patent 6,330,551) in view of Crawford et al. (US Patent 6,502,113).

9. As per claims 1, 81, 92, 100, 123, 138, 146, 158, 167, 168, 169, 199, 215, 225, 235, 251, 266, 276, 285 and 301,

Burchetta ('551) discloses a platform for supporting negotiation between parties to achieve an outcome, the platform being a computerized apparatus comprising: party goal program means for: defining a respective party's goal program in respect of said outcome, said goal program comprising at least one objective function, having at least one goal expressed by at least one constraint comprising at least one of a deviation variable, a decision variable and a target value, said deviation variable being usable to form said objective function, ( Column 4, lines 48-67)

associating each of said objective functions with a level of importance, assigning each of said goals an importance weighting within its level, and assigning to deviation variables within each objective function a respective importance weighting, said party goal program unit comprising a party input unit for allowing a party to provide data for a respective goal program, ( Column 4, lines 48-67)

an output means for offering said offer to said respective parties, a response receiver means for receiving from respective parties either counter offers or acceptances, said response receiver means for providing counter offers expressed as modified goal programs to said goal program negotiator for further

negotiation, said platform advancing to a next level upon an acceptance. (Figure 3, column 7, lines 25-46)

Burchetta ('551) does not explicitly disclose a negotiator means associated with said party goal program for: receiving a goal program of at least one of said respective parties, and carrying out negotiations using said at least one goal program by considering said objective functions levelwise in the respective goal program to approach at said mutually compatible outcome by carrying out minimization at a respective level, therewith to form an offer. Crawford et al. ('113) discloses a negotiator means associated with said party goal program for: receiving a goal program of at least one of said respective parties, and carrying out negotiations using said at least one goal program by considering said objective functions levelwise in the respective goal program to approach at said mutually compatible outcome by carrying out minimization at a respective level, therewith to form an offer. (Column 8, lines 14-37). It would be obvious to one having ordinary skill in the art at the time of the invention to combine Burchetta ('551) method with Crawford et al. ('113) 's teaching in order to maximize the efficiency of the negotiations..

in regard to claim 81 Burchetta ('551) discloses wherein said goal program unit further comprises a unifier, and the unifier comprises a goal program input unit for receiving a local party's goal program and an opponent's goal program to be unified therewith, said goal programs comprising objective functions associated with deviation variables of goal constraints and being arranged in levels, (column 4, lines 48-67, figure 2 element 24)and the negotiator further comprises: an optimizer for finding best solutions to goal programs,



connected to find best values for said objective functions and constraints of said local party's goal program levelwise, and a worst case calculator for finding worst solutions for goal programs, connected to find worst values for said objective functions and constraints of said opponent's goal program levelwise, (column 4, lines 48-67) said negotiator being operable to: use said optimizer and said worst case calculator in succession, level by level to produce successive value sets for evaluation therefrom to form level by level unification offers, and advance from one level to another level only following acceptance by said parties of a unification offer regarding a previous level.(column 7, lines 25-46)

10. As per claim 2,

Burchetta ('551) discloses the platform of claim 1, further comprising a goal program unifier, associated with said party goal program unit for receiving goal programs of respective parties, and carrying out unification of said goal programs to determine whether two goal programs have a common field of interest from which a mutually compatible outcome is derivable. (Column 4, lines 48-67; Figure 3 [Examiner notes that the claim feature is directed towards intended usage of the claimed system.]

11. As per claim 3,

Burchetta ('551) discloses the platform of claim 1, (Original) The platform of claim 1, wherein said party goal program unit comprises a constraint arrangement unit for arranging goal constraints level wise

in a first party's goal program such that conditional weakening from said outcome for a goal in a trade-off involves strengthening of other goals within the same level of said first party.

12. As per claim 4,

Burchetta ('551) discloses the platform of claim 1, wherein said goal program unit comprises a trade-off unit for arranging goals levelwise in a first party's goal program such that goals of a given level are negotiated with goals of a same level of another party. (Column 4, lines 48-67; Figure 3 [Examiner notes that the claim feature is directed towards intended usage of the claimed system.]

13. As per claim 5,

Burchetta ('551) discloses the platform of claim 1, wherein said party goal program unit is operable to place said objective functions in a hierarchy according to the respective associated level of importance, and to express each goal in terms of at least one decision variable and at least one deviation variable. (Column 4, lines 48-67; Figure 3 [Examiner notes that the claim feature is directed towards intended usage of the claimed system.]

14. As per claim 24,

Burchetta ('551) discloses the platform of claim 1,

wherein said party input unit is operable to request a decision variable interval, and a penalty specification for deviating from a target within said interval, and wherein said unifier is operable to define a working interval as an intersection between respective intervals of two parties. (Column 4, lines 48-67; Figure 3 [Examiner notes that the claim feature is directed towards intended usage of the claimed system.] )

15. As per claim 32,

Burchetta ('551) discloses the platform of claim 1,

Wherein said party input unit is operable to permit a party to define at least one single dimension interval goal in respect of said outcome, and to associate said goal with a range of indifference having an upper bound and a lower bound, a first weighting value for deviations below said lower bound, a second weighting value for deviations above said upper bound and a relative importance for said goal, said unifier being operable to use said range of indifference, said weightings and said relative importance to unify said at least one goal with at least one other goal to determine said compatibility. (Column 4, lines 48-67; Figure 3 [Examiner notes that the claim feature is directed towards intended usage of the claimed system.] )

As per claims 34 and 60,

16. Burchetta ('551) discloses the platform of claim 1,

wherein said party input unit is operable to permit a party to define a two dimensional trade-off goal constraint by entering two two-dimensional points, said party goal program

unit being operable to define a trade-off line between said two points. (Column 4, lines 48-67; Figure 3 [Examiner notes that the claim feature is directed towards intended usage of the claimed system.]])

As per claims 45 and 48,

17. Burchetta ('551) discloses the platform of claim 1,

wherein said party input unit is operable to permit parties to define goals comprising pair wise variable trade-offs having at least two points and a trade-off function defined for distance from a line joining said points, and wherein said party goal program unit is operable to prevent inconsistent trade-offs to be defined within the platform by preventing said party input unit from accepting~ more than one trade-off from referring, directly or indirectly, to any given pair of decision variables. (Column 4, lines 48-67; Figure 3 [Examiner notes that the claim feature is directed towards intended usage of the claimed system.]]).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN M. WINTER whose telephone number is (571)272-6713. The examiner can normally be reached on M-F 8:30-6, 1st Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Calvin Hewitt can be reached on (571) 272-6709. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 3685

JMW

/Calvin L Hewitt II/

Supervisory Patent Examiner, Art Unit 3685